

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for sending data packets from a first communication subsystem via a first network element to a second network element in a second communication subsystem;
the method comprising ~~the steps of~~:
sending the data packets in a first plurality of data flows in the first communication subsystem;
mapping the first plurality of data flows to a second plurality of data flows in the second communications subsystem;
establishing at least one filter for controlling the mapping;
associating the at least one filter with a data flow within the second plurality of data flows; and
mapping at least one data flow on the basis of the filter; and
configuring the filter from the second network element,
wherein at least one of the data flows is bidirectional having a first direction from the first plurality of data flows to the second plurality of data flows and a second direction which is inverse to the first direction, and the at least one filter is modified to update a Quality of Signal profile of a PDP context on the basis of user data packets sent in the second direction.
2. (Cancelled)
3. (Previously Presented) A method according to claim 1, further comprising configuring the filter in a packet data protocol context activation or modification message.
4. (Original) A method according to claim 3, further comprising configuring at least two filters in one packet data protocol context activation or modification message and identifying each filter with a distinct identifier.

5. (Previously Presented) A method according to claim 1, further comprising configuring the at least one filter in a dedicated message.

6. (Previously Presented) A method according to claim 1, further comprising configuring the filter in a message which is transparent to at least some nodes between the first and the second network elements.

7. (Currently Amended) A method according to claim 1, wherein the first communications subsystem is an Internet Protocol network and the method comprises allocating one IP address which is shared by all data flows within the second plurality of data flows.

8. (Currently Amended) A method according to claim 1, wherein the first communications subsystem is an Internet Protocol network, and the method comprises allocating a separate Internet Protocol address to each data flow within the second plurality of data flows.

9. (Original) A method according to claim 1, wherein the second communications subsystem is a packet radio network employing packet radio protocol, and the configuring step comprises sending a packet radio protocol context activation message or a packet radio protocol context modification message.

10. (Previously Presented) A method according to claim 1, wherein the associating is based on the second network element's address in the first communication subsystem.

11. (Original) A method according to claim 1, wherein the associating is based on the second network element's identifier in the second communication subsystem.

12. (Original) A method according to claim 11, wherein the second network element's identifier is its International Mobile Subscriber Identity or tunnel identifier.

13. (Original) A method according to claim 1, further comprising:

performing the mapping on the basis of the filter to data flows conveying real-time information; and

establishing default parameters for mapping the remaining data flows.

14. (Currently Amended) A method according to claim 1, further comprising defining one data flow within the second plurality of data flows as a default data flow, to which all data flows of the first plurality of data flows are mapped which do not conform to the at least one filter.

15. (Cancelled)

16. (Currently Amended) A method according to claim 1, wherein a gateway element mapping the data flows:

receives a data packet in the second direction from a first data flow within the second plurality of data flows;

forwards the data packet to a second data flow within the first plurality of data flows;
and

modifies the at least one filter for mapping the second data flow to the first data flow.

17. (Currently Amended) A method according to claim 1, wherein at least one data flow within the first plurality of data flows is tunneled over a data flow within the second plurality of data flows, and at least two data flows within the second plurality of data flows have mutually different Quality of Service characteristics.

18. (Original) A method according to claim 1, wherein the second network element is a mobile station.

19. (Currently Amended) A first network element for routing data packets from a first communication subsystem to a second network element in a second communication subsystem;

the first network element being ~~adapted~~ configured to:

receive the data packets from the first communication subsystem in a first plurality of data flows;

map the first plurality of data flows to a second plurality of data flows in the second communication subsystem;

establish at least one filter for controlling the mapping;

associate the at least one filter with a data flow within the second plurality of data flows;

map at least one data flow on the basis of the filter;

receive a mobile station-generated digital configuration signal for configuring the filter; and to

configure the filter on the basis of the mobile station-generated digital configuration signal,

wherein at least one of the data flows is bidirectional having a first direction from the first plurality of data flows to the second plurality of data flows and a second direction which is inverse to the first direction, and the at least one filter is modified to update a Quality of Signal profile of a PDP context on the basis of user data packets sent in the second direction.

20. (Cancelled)

21. (Currently Amended) A mobile station for a packet radio network, ~~operable~~ configured to send a digital configuration signal for creating or modifying a packet data protocol context in a support node for interfacing an external communication subsystem with the packet radio network;

wherein the digital configuration signal comprises information which at least partially defines a filter for controlling mapping of data flows from the external communication subsystem to the packet radio network by the support node,

wherein at least one of the data flows is bidirectional having a first direction from the external communication subsystem to the packet radio network and a second direction which is inverse to the first direction, and the filter is modified to update a Quality of Signal profile of a PDP context on the basis of user data packets sent in the second direction.

22. (Previously Presented) A method according to claim 1, wherein the second network element is a mobile station.

23. (Previously Presented) A first network element according to claim 19, wherein the first network element is a Gateway GPRS Support Node.